Please provide the following information, and submit to the NOAA DM Plan Repository.

# Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

# 1. General Description of Data to be Managed

# 1.1. Name of the Data, data collection Project, or data-producing Program:

EM300 Multibeam Sonar Data collected from May 7 to May 22 from NOAA Ship Hi' ialakai cruise HA-17-01 to the Commonwealth of Northern Mariana Islands (CNMI) and Guam in 2017

# 1.2. Summary description of the data:

Multibeam data were collected using a Simrad EM300 30-kHz sonar aboard NOAA Ship Hi'ialakai, a 68-m (218') NOAA research vessel, from May 7 to May 22, 2017 during cruise HA-17-01. Multibeam data were acquired at Guam and Aguijan in the Marianas. The multibeam data were collected using Kongsberg SIS software in the \*.all format and processed using SABER and QPS Qimera editing software. Surface sound velocity values were supplied by Seabird SBE-45 MicroTSG and a SBE-38, and motion corrections from a TSS/Applanix POS MV (Model 320 Version 5) vertical reference were applied to the data in real time. WGS84 datum. The vessel is equipped with a sound velocity profiler and casts were acquired during mapping operations. However, because insufficient sound velocity profile data were collected at depth during surveys around Guam, sound velocity profile data were applied from an earlier survey (HI-07-02). At Aguijan, suitable sound velocity data were acquired; however, the surveyed areas were previously mapped and therefore the data for Aguijan was not processed. Depths mapped range from ~50 m to 1000 m. These data are not to be used for navigation.

# **1.3.** Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

#### 1.4. Actual or planned temporal coverage of the data:

2017-05-07 to 2017-05-22

#### 1.5. Actual or planned geographic coverage of the data:

W: 144.326, E: 145.116, N: 13.913, S: 12.761

Guam

W: 145.502, E: 145.756, N: 15, S: 14.803

Aguijan

# 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

# 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Kongsberg EM300

Platform: Hi'ialakai

Physical Collection / Fishing Gear: Not applicable

# 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

# 1.8.1. If data are from another observing system, please specify:

# 2. Point of Contact for this Data Management Plan (author or maintainer)

#### 2.1. Name:

Annette M DesRochers

#### 2.2. Title:

Metadata Contact

# 2.3. Affiliation or facility:

#### 2.4. E-mail address:

annette.desrochers@noaa.gov

#### 2.5. Phone number:

(808)725-5461

# 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

#### 3.1. Name:

Frances Lichowski

#### 3.2. Title:

Data Steward

#### 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

# 4.1. Have resources for management of these data been identified?

Yes

# 4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

Unknown

#### 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

# 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

Multibeam data processing procedures.

# **Process Steps:**

- 2017-11-09 00:00:00 - -Raw data were acquired with Kongsberg SIS (\*all) -\*all data were converted to \*gsf within SABER processing software -Vessel offset and sound velocity profile corrections were applied in SABER -Corrected \*gsf files were imported into QPS Qimera for editing and surface production -Where data were of sufficient coverage and quality, a medium-tension spline filter was used to remove spurious data, and further manual editing was conducted to remove any remaining noise. -Final surface grids were exported from Qimera to GeoTiff.

# 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

# 5.2. Quality control procedures employed (describe or provide URL of description):

- Surface sound velocity values were supplied by Seabird SBE-45 MicroTSG and a SBE-38, and motion corrections from a TSS/Applanix POS MV (Model 320 Version 5) vertical reference were applied to the data in real time.
- Vertical adjustments using sound-velocity corrections were applied from a prior survey (HI-07-02)
- Spurious data points were removed (automated and manual)
- Comparisons with previously acquired, overlapping data

#### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

#### 6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

# 6.1.1. If metadata are non-existent or non-compliant, please explain:

# 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

# 6.2.1. If service is needed for metadata hosting, please indicate:

# 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/47803

# 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\_PD-Data\_Documentation\_v1.pdf

#### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

# 7.1. Do these data comply with the Data Access directive?

Yes

# 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

# 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

#### 7.2. Name of organization of facility providing data access:

National Centers For Environmental Information (Boulder) (NCEI-Boulder)

#### 7.2.1. If data hosting service is needed, please indicate:

# 7.2.2. URL of data access service, if known:

https://www.ngdc.noaa.gov/ships/hi\_ialakai/HA1701\_mb.html https://www.ngdc.noaa.gov/ships/hi\_ialakai/HA1701\_mb.html https://www.ngdc.noaa.gov/ships/hi\_ialakai/HA1701\_mb.html

https://www.ngdc.noaa.gov/ships/hi ialakai/HA1701 mb.html

### 7.3. Data access methods or services offered:

Data can be accessed online via the NOAA National Centers for Environmental Information (NCEI) Bathymetry Archive.

### 7.4. Approximate delay between data collection and dissemination:

Unknown

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

#### 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

# 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended) NCEI-CO

# 8.1.1. If World Data Center or Other, specify:

# 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

# 8.2. Data storage facility prior to being sent to an archive facility (if any):

Pacific Islands Fisheries Science Center - Honolulu, HI

# 8.3. Approximate delay between data collection and submission to an archive facility: Unknown

# 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

NOAA IRC and NOAA Fisheries ITS resources and assets.

#### 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.